

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-12. (canceled)

13. (new) A resonator filter structure on a substrate to provide a passband defined by a center frequency f_C , a lower cut off frequency f_L , and an upper cut off frequency f_U , the resonator filter structure comprising:

an input port;

an output port; and

a lattice type filter section between the input port and the output port, the lattice type filter section comprising:

first resonator elements arranged in series branches as series arms having a resonance frequency f_{X1R} and an anti-resonance frequency f_{X1A} ;

second resonator elements arranged in lattice branches as lattice arms having a resonance frequency f_{X2R} and a anti-resonance frequency f_{X2A} , wherein all of said resonator elements within said lattice type filter section have substantially equal resonance frequencies and substantially equal anti-resonance frequencies; and

means for tuning at least one of said anti-resonance frequencies or one of said resonance frequencies of the resonator elements, wherein the means for tuning at least one of said anti-resonance frequencies comprises a capacitance C connected to each of said resonator elements.

14. (new) The resonator filter structure according to claim 13, wherein said capacitance C connected to each of said resonator elements comprises a parallel capacitance C connected in parallel to each of said resonator elements.

15. (new) The resonator filter structure according to claim 14, wherein all branches of said lattice type filter section substantially equal total capacitance at least outside said passband.

16. (new) The resonator filter structure according to claim 15, wherein said parallel capacitance C corresponds with

$$C=(1-x) \cdot A \cdot C_{AREA},$$

wherein A is an area on said substrate of a bulk acoustic wave (BAW) resonator element in one branch types of said lattice filter section wherein said area has a capacitance per area C_{AREA} and x is a fraction of said area A, wherein $x \cdot A$ is an area of another BAW resonator element of another branch type of said lattice filter section.

17. (new) The resonator filter structure according to claim 13, wherein said capacitance C connected to each of said resonator elements comprises a series capacitance C connected in series to each of said resonator elements.

18. (new) The resonator filter structure according to claim 13, wherein said resonator elements comprise acoustic wave resonator elements in the form of bulk acoustic wave (BAW) resonator elements or surface acoustic wave (SAW) resonator elements.

19. (new) The resonator filter structure according to claim 18, wherein said BAW resonator elements comprise at least a piezoelectric layer having an equal thickness in all of said BAW resonator elements.

20. (new) The resonator filter structure according to claim 19, wherein said piezoelectric layer comprises a layer of piezoelectric material of aluminum nitride (AlN) and/or zinc oxide (ZnO) and at least an optional additional dielectric layer of silicon oxide (SiO₂).

21. (new) The resonator filter structure according to claim 13, further comprising means for impedance matching connected at least to one port of said input port and said output port.
22. (new) The resonator filter structure according to claim 21, wherein said means for impedance matching comprise discrete inductive elements and/or discrete capacitive elements connected in series and/or in parallel to said at least one port.
23. (new) The resonator filter structure according to claim 13, wherein a first port signal guidance of at least one port of said input port and said output port is balanced.
24. (new) The resonator filter structure according to claim 23, wherein a second port signal guidance of at least one port of said input port and said output port is unbalanced.
25. (new) The resonator filter structure according to claim 13, wherein the resonator filter structure comprises a radio frequency (RF) resonator structure.